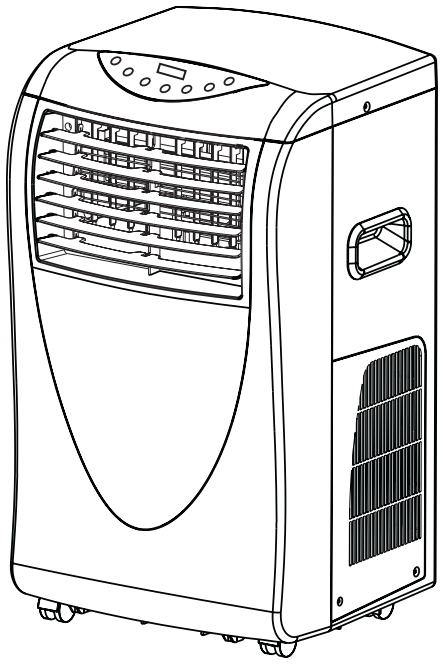
Friedrich

Installation & Operation Manual

ZoneAire

Portable Air Conditioner

Model P-12



Rev 6-07

Foreword

Thank you for purchasing the new Friedrich ZoneAire® Portable Air Conditioner. We are confident that you will find this unit a quiet and efficient example of Friedrich reliability.

This Installation and Operation Manual has been designed to insure maximum satisfaction in the performance of your unit. For years of trouble-free service, please follow these installation instructions closely.

Notice:

(1) This appliance is not intended for use by young children without supervision.

(2) The plug should be accessible after installation of the appliance.

(3) The unit shall be installed in accordance with local and national codes.

(4) If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.

(5) Please wait three minutes before restarting when the power is broken.

(6) Due to momentary high current demand when your air conditioner is started, use a "TIME DELAY" fuse or a HACR type circuit breaker.

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.

This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

Table of Contents

Introduction 2

Unit Identification 3

Operation of Remote Control..... 5

Control Panel Unit Operation..... 6

Water Drainage Methods..... 7

Maintenance/service..... 8

Safety cautions 8

Troubleshooting 8

Installation 10

Hose and window kit..... 10

Accessories 11

Introduction

Portable Air Conditioner

This Portable Air Conditioner is designed to provide a quick and easy cooling solution for areas that either do not have air conditioning or areas that the current system cannot maintain at a comfortable level.

This unit is also great as a back-up system in case the primary cooling system should fail.

Other means of conditioning should be employed when the indoor temperature is either below 17°C (63°F) or above 35°C (95°F) .

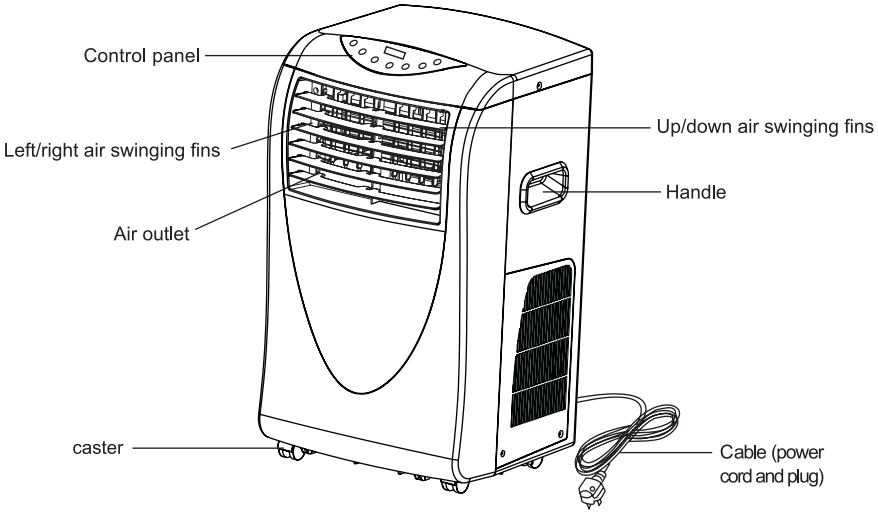
Attention

Before you use your PORTABLE AIR CONDITIONER, please read this instruction manual carefully so that you get the best performance from the unit.

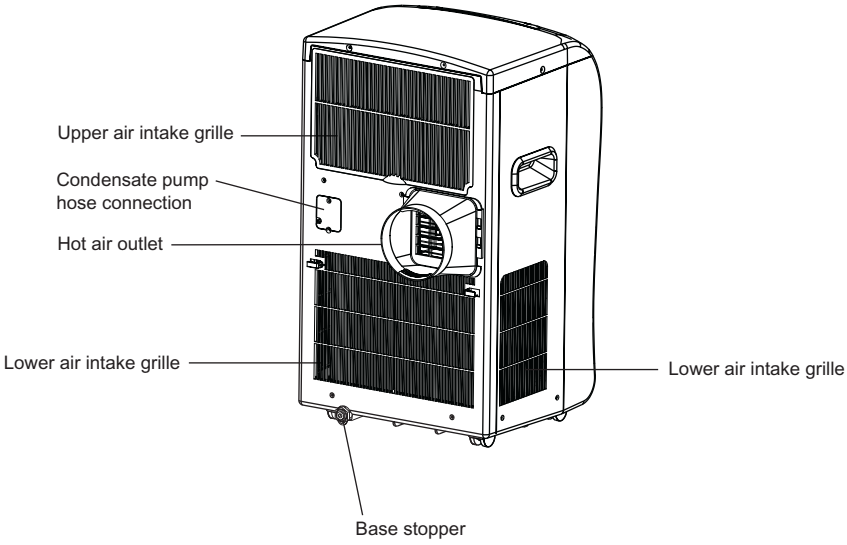
This instruction manual is used for guidance and does not form part of a contract. We reserve the right to make technical changes without prior notice.

Unit Identification and Function

Front

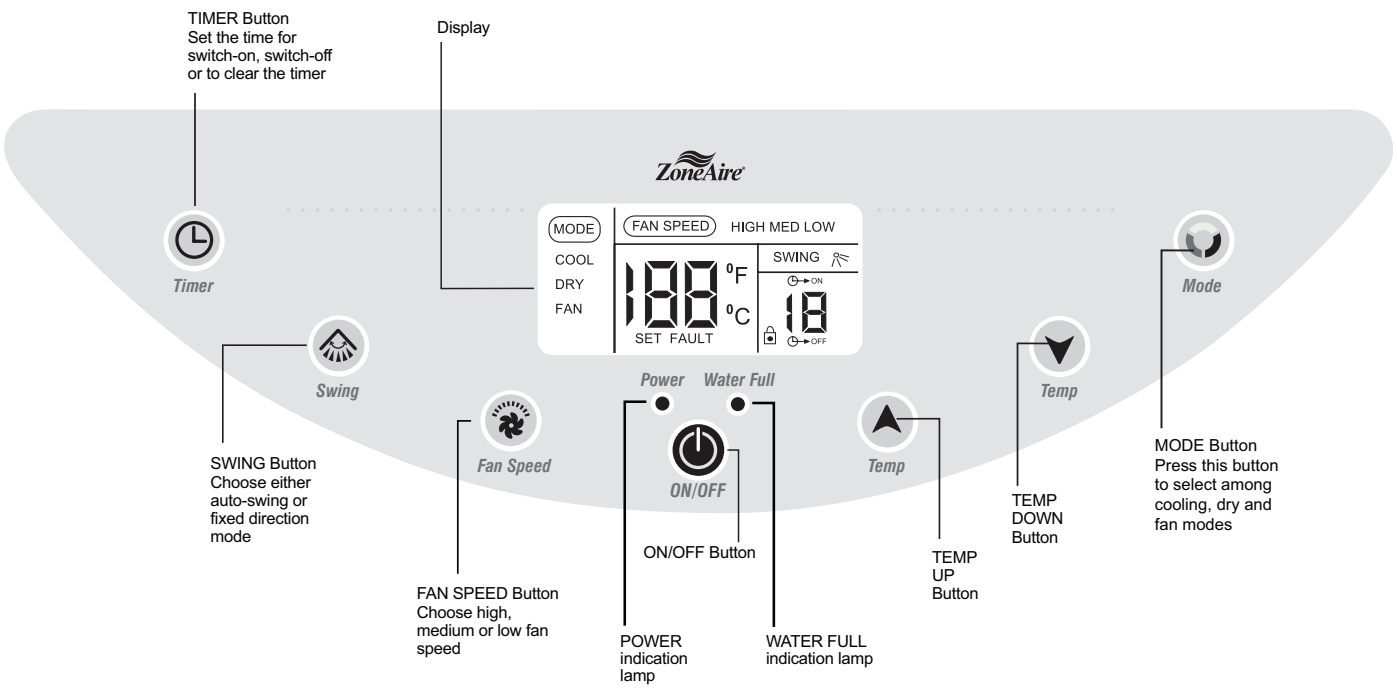


Back

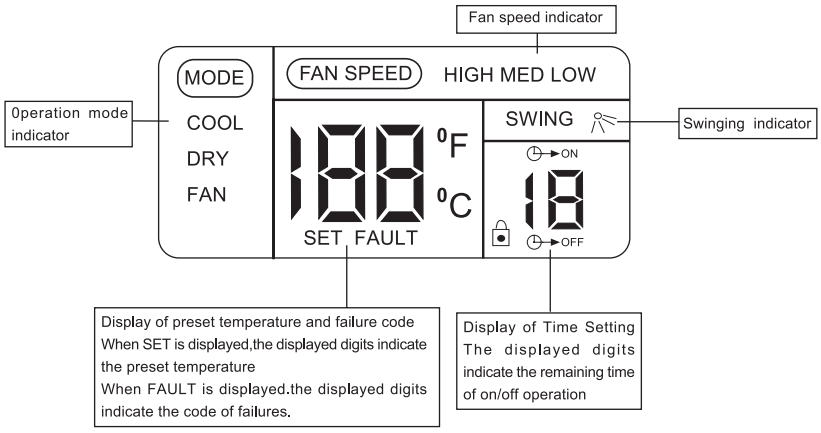


Unit Identification and Function

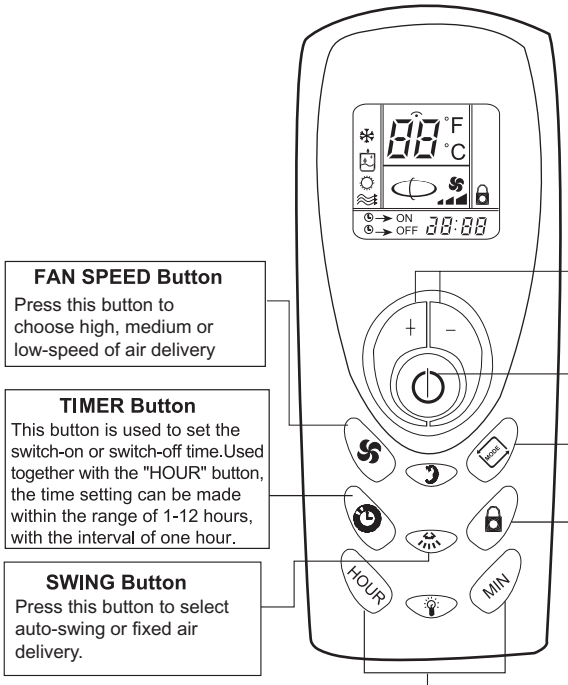
Control Panel



Display Screen



Remote Control Identification and Function



Temperature Setting Button
This button is used to set the room temperature. Each pressing of the "+" or "-" button increases or decreases the temperature by 1°.

FAN SPEED Button
Press this button to choose high, medium or low-speed of air delivery

ON/OFF Button
Press this button to turn the machine ON or OFF.

TIMER Button
This button is used to set the switch-on or switch-off time.Used together with the "HOUR" button, the time setting can be made within the range of 1-12 hours, with the interval of one hour.

MODE Selection Button
Pressing this button will select among cool, dry or fan modes.

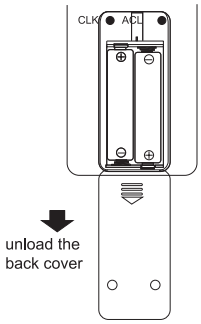
SWING Button
Press this button to select auto-swing or fixed air delivery.

HOLD Button
Press this button to lock or unlock the keyboard ·

Time Setting Button
The buttons is used to set the current time or the time for timed switch-on or switch-off.

PRESENT TIME SETTING PROCEDURE

When batteries are inserted, the time is automatically set to 12:00 AM (EX: Set to 10:30 AM)



1	**Press the CLK button.** Unload the back cover. Push the clock button with the tip of a ball-point pen, etc. The time indicator is blinking and can set the present time.
2	**Press the HOUR button. (Set to AM 10:)**
3	**Press the MIN button. (Set to 30)**
4	**Press the CLK button again,then reattach the back cover.**

NOTE The timer is set on the basis of the present time. So set the present time correctly.

Control Panel Operation

Dehumidifying and cooling operation

The operating range for cooling operation is 63°F - 88°F (or 17°C - 31°C) and the operating range for dehumidifying is 68°F - 88°F (or 20°C - 31°C).

Power source

- The AC socket must be firm and reliable.
- Don't connect the portable air conditioner to a multiple socket outlet which is also being used for other electrical appliances.
- Insert the AC power plug securely into the AC socket before using the unit, when it beeps after two seconds, press ON/ OFF button, the unit begins to run.

LCDI power cord information

All Friedrich portable air conditioners are shipped from the factory with a Leakage Current Detection Interrupter (LCDI) equipped power cord. The LCDI device meets the UL and NEC requirements for cord connected air conditioners effective August 2004.

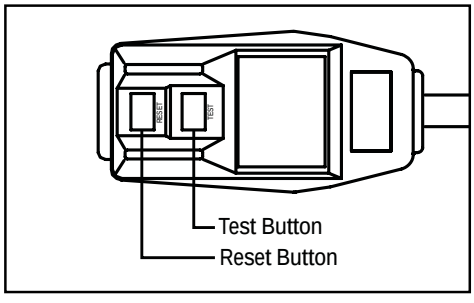
To test your power supply cord:

1. Plug power supply cord into a grounded 3 prong outlet.
2. Press RESET (See drawing below).
3. Press TEST (listen for click; Reset button trips and pops out).
4. Press and release RESET (listen for click; Reset button latches and remains on). The power supply cord is ready for operation.

NOTE: LCDI device is not intended to be used as a switch.

Once plugged in the unit will operate normally without the need to reset the LCDI device.

If the device fails to trip when tested or if the power supply cord is damaged it must be replaced with a new supply cord from the manufacturer. We recommend you contact our Technical Assistance Line at (800) 541-6645. To expedite service, please have your model and serial number available.



WARNING: NEVER CUT OR REMOVE THE GROUNDING PRONG FROM PLUG. NEVER USE EXTENSION CORDS TO OPERATE AN AIR CONDITIONER.

Cooling operation

1. Press MODE button to choose the cooling mode, LCD window will show "cool".
   During the cooling operation, always place the air exhaust hose through an open window.
2. Repeatedly press TEMP+ or TEMP- button to set a proper room TEMP. between 63°F - 88°F.
3. Press FAN SPEED button to choose a proper fan speed: high, middle, low speed.
4. Press SWING button to adjust the air delivery direction, The LCD window will show " ".

NOTE:

In order to improve the cooling efficiency:

a) If your room is directly exposed to the sun, draw the curtains.

b) Do not place near other heat source.

Dehumidifying Operation

1. Keep the windows and the doors closed to aid in effectively dehumidifying the room.
2. Press MODE button to choose the dehumidifying mode, LCD window will show "DRY", the fan speed cannot be adjusted.

When used as dehumidifier only it is not necessary to install the exhaust hose.

Time Set Function

To set the time to start the machine, with the unit off (but power supplied), press TIMER button, the LCD window will show "◷← ON", continually press the TIMER button, set the preferred start time. The setting range is 1-12 hours.

To set the time to stop the machine, with the unit running, press TIMER button, the LCD window will show "◷← OFF", continually press the TIMER button ,set the preferred time to stop the machine. The setting range is 1-12 hours

NOTE: During timer mode, if the TIMER button is pressed again, it will cancel the timer operation.

Condensation Handling

Your ZoneAire® Portable Air Conditioner is designed to evaporate the condensation removed from the interior space through the exhaust hose. Under certain conditions it is possible that the unit will not evaporate 100% of the removed moisture.

The unit is designed with a built-in reservoir and pump to accumulate excess condensate and help dispose of it.

Internal Water Level

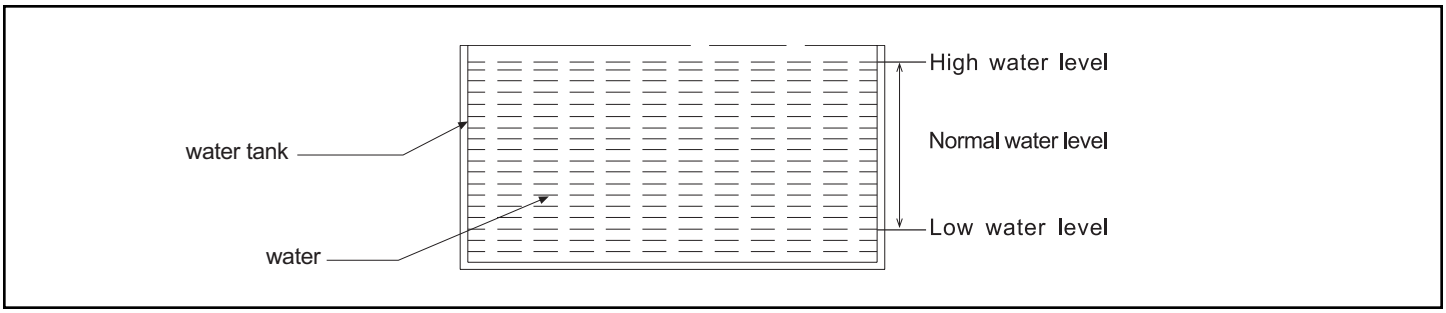
1. Under any mode if the water level is in the “low” area the unit will function normally.
2. If the water level is in the “normal” area the unit will continue to function normally with the internal recirculation pump running to evaporate the water. You may hear the pump run at times.
3. If the water level is in the “high” area the unit will function normally and the water pump will work for 10 minutes. After that, if the water level returns to the “low” or “normal” level the unit will function normally. If after running 10 minutes, the water level is still in the “high” area the machine will turn off and the WATER FULL lamp on the control panel will illuminate. The LCD window indicates failure code E5.

Draining Water

The water can be drained from the unit either by removing the base stopper and letting the water drain by gravity. Or the condensate pump hose may be used to direct the condensate to a drain location like a sink.

1. When the WATER FULL lamp is on unplug the unit and move the unit to a suitable location for draining the condensation.
2. If using the gravity drain method ensure that the base stopper is located above a suitable area for draining the condensate and remove the stopper. Re-install the stopper once all water has drained.

   If using the condensate removal pump ensure that the condensate pump hose is located in a proper area for drainage. Restore power to the unit and press both the TIMER and SWING buttons simultaneously and the pump will begin to run.
3. Return the unit to the original location and restore power and duct connections.
4. The WATER FULL indicator should be off and the unit will return to normal operating mode.



Maintenance/Service

WARNING

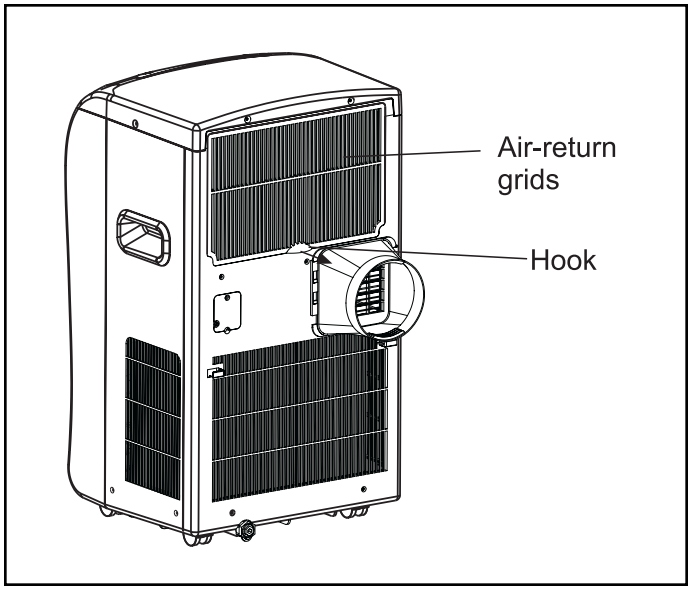
- Disconnect the power before cleaning.
- Make sure there is no power to the unit before beginning to maintain or repair the unit in order to prevent accidents caused by electrical shock.

Cleaning the air filter

If the air filter is blocked with a lot of dust, the air flow volume will be reduced. Clean the filter once every two weeks.

Open and clean the air filter:

1. Directly grasp the hook on the bottom of the filter to remove the air-return grids.
2. Take out the air filter from the filter cover.
3. Wash the air filter by immersing it gently into warm (about 40°C or 104°F) water with a neutral detergent or vacuum the filter clean.
4. Rinse the filter and dry it thoroughly in a shaded place.
5. Install the air filter back to its original place.



Maintenance/Service

Cleaning the air conditioner

Clean the surface of the unit with a damp cloth, then dry using a duster or similar.

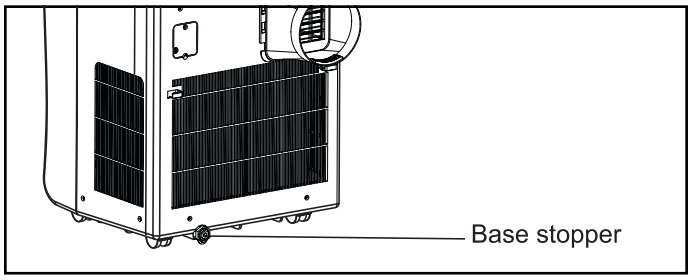
CAUTION Do not use chemical solvent (like benzene or alcohol) to clean the surface of the unit. If you do so, the surface may be scratched, damaged or even cause the case to become deformed.

Prior to operating seasons

1. Check to ensure that the air inlets and outlets of the unit are not blocked.
2. Make sure that air filter is properly in place before operating the machine. If the machine is operated with air filter removed, dust and foreign objects will result in faulty performance of the air conditioner.

Preparation for storage

1. Turn off the air conditioner, disconnect the power.
2. Perform proper maintenance to the air filter and other parts.
3. Open the base stopper to drain out all of the water from the base. Operating the unit in fan only mode for 12 hours will help ensure there is no moisture within the unit.
4. Cover the unit to prevent dust or filth from entering the unit.



Safety Precautions

CAUTION

- Make sure the unit is installed in an accessible location.
- Do not locate the unit in direct sunlight so as to avoid discoloration of the plastic.
- Do not use the unit in water or near water to avoid electrical shock.
- Do not use near gas appliances, fires or in the vicinity of flammable liquids.
- Only operate the unit in the appropriate upright position.

Power Sources

WARNING

- Do not use a damaged or improper AC socket.
- When unplugging the unit, hold the power plug securely and pull it out carefully.
- Never use an extension cord with this air conditioner.

Other Warnings

- Keep the unit one meter away from TV sets or radios to avoid the risk of electromagnetic interference.
- Ensure that the discharge air outlet is free from obstructions and not impeded by walls or other structures.

Troubleshooting

Before seeking repair or service, please check the following first:

Trouble	Check	Action
Air conditioner does not operate	Is there power?	
	Is it plugged in?	Push the plug into the wall socket
	Is the fuse or circuit breaker switch off?	Change the fuse or reset breaker
	Is timer on?	Pres TIMER button
Cooling efficiency is not good	Is air inlet or outlet blocked?	Clear the air path
	Is there any other heat source in the room?	Move the unit away from heat source
	Are air filters dirty?	Clean the air filter
	Is SET TEMP suitable?	Set to a suitable temperature
	Is indoor fan speed set at low?	Set to a suitable fan speed
Too much noise and vibration	Is the sound part of the refrigeration cycle?	The sound may be normal
	Is unit leveled?	Move unit to a level location
The machine starts and stops frequently	Is the voltage of the power source correct and continuous?	Repair the power source
	Is the air exhaust bent?	Try to keep the air exhaust horizontal

WARNING In case of major malfunction, disconnect power immediately and call for service.

Troubleshooting

Self diagnosis function

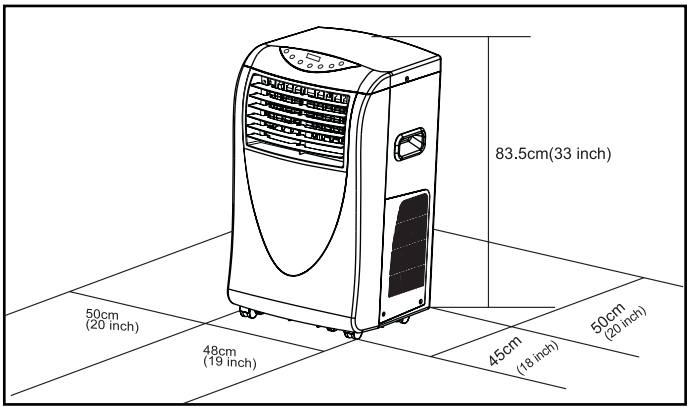
The following error codes are pre-programmed into each unit to help identify possible unit conditions.

Failure code	Diagnosis of Malfunction
E2	Room Temperature sensor failure
E3	Coils sensor failure
E4	Unit malfunction
E5	Water level exceeded capacity

Installation

Selection of installation location

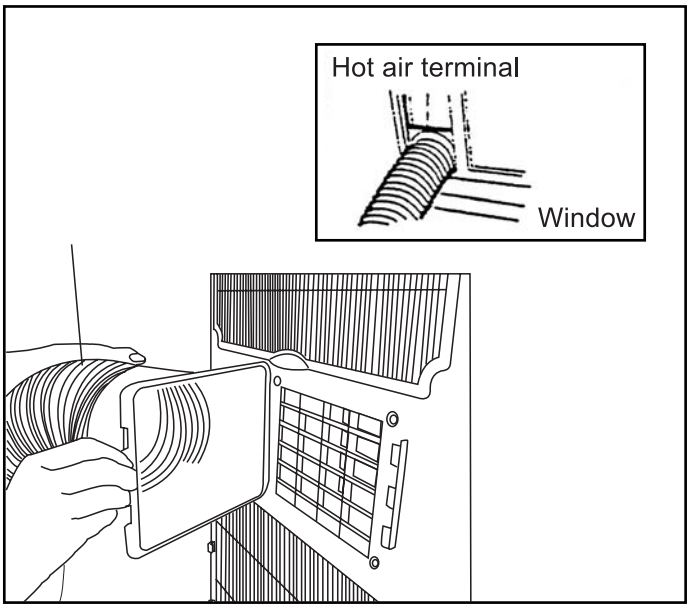
Put the portable air conditioner in a flat location where the air outlets cannot be covered up, place the unit no less than 20 in. (50cm) away from a wall or other obstacle.



Mounting the exhaust hose

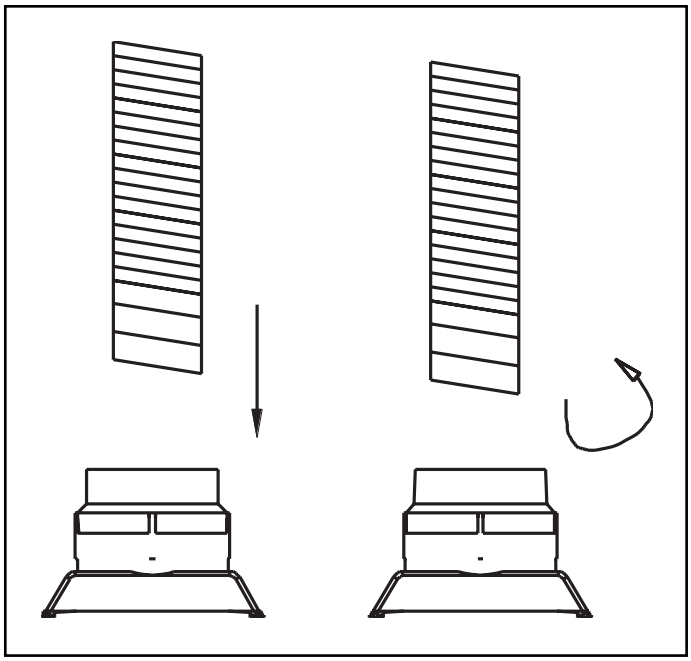
1) Fix the square end of the exhaust hose to the exhaust terminal of the unit as shown.
2) Put the other end (discharge) to the nearest window.

Note: The length of the air exhaust hose is between 24" - 72". Try to keep the hose as straight and horizontal as possible.



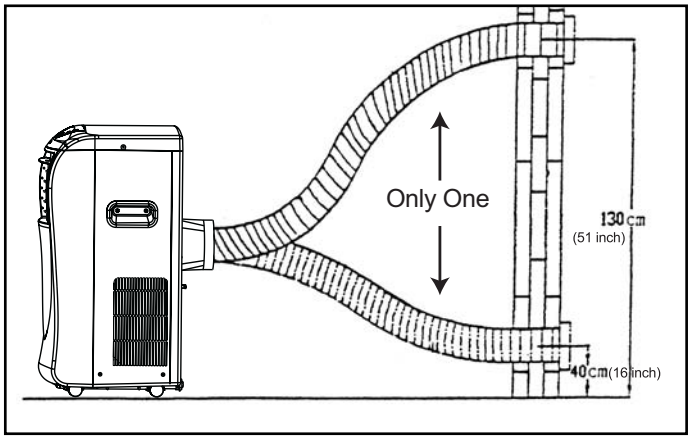
Instructions to install hose

If the hose becomes disconnected from the hose fitting it must be reinserted. Fit the hose to the hose fitting then rotate it 2 - 3 revolutions to tighten the hose into the fitting. See figure below:



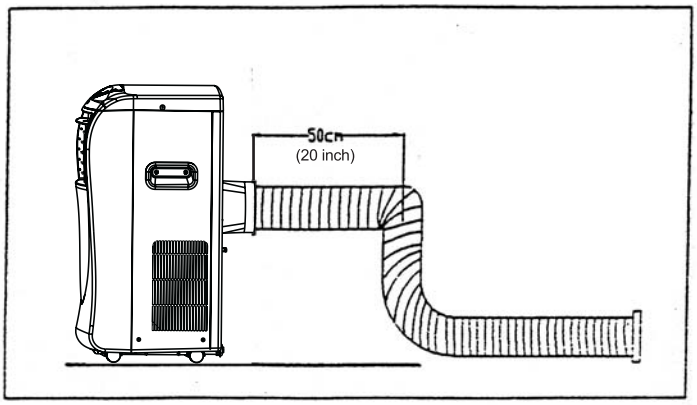
Correct mounting shown below

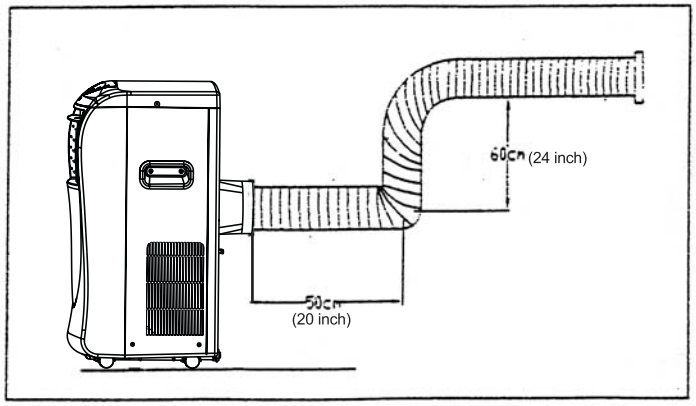
(If mounting in the wall, the height of the hole should be 16" - 51")



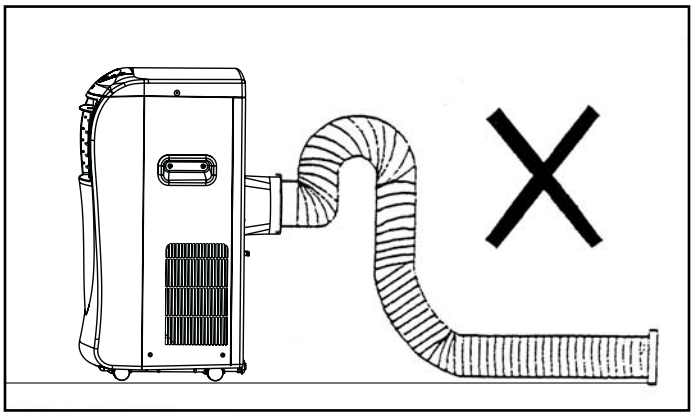
Instructions to install hose cont'd

If the air exhaust requires bending, see below:



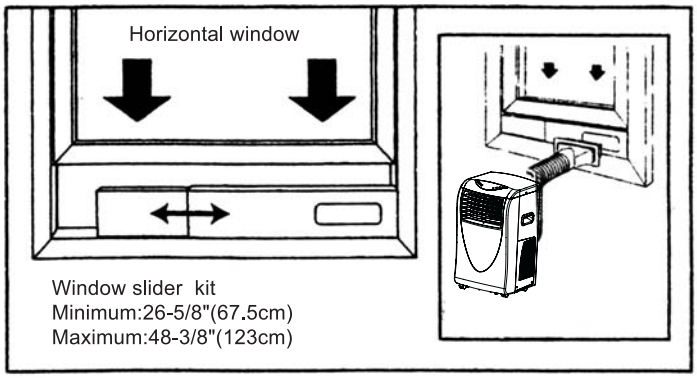


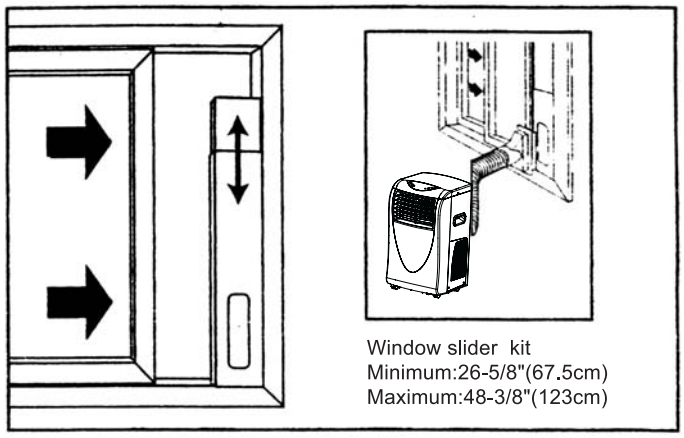
Incorrect hose mounting (Air exhaust bend is too great and will restrict airflow). See below:



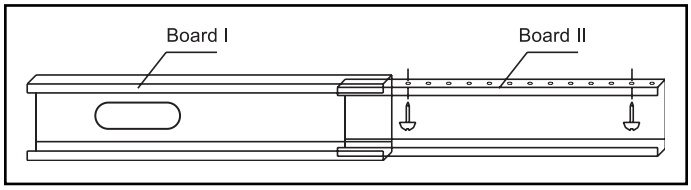
Window kit installation

Your window kit has been designed to fit most standard “vertical” and “horizontal” window applications. However, it may be necessary for you to improvise/modify some aspects of the installation procedures for certain types of windows. Please refer drawings below for minimum and maximum window openings.



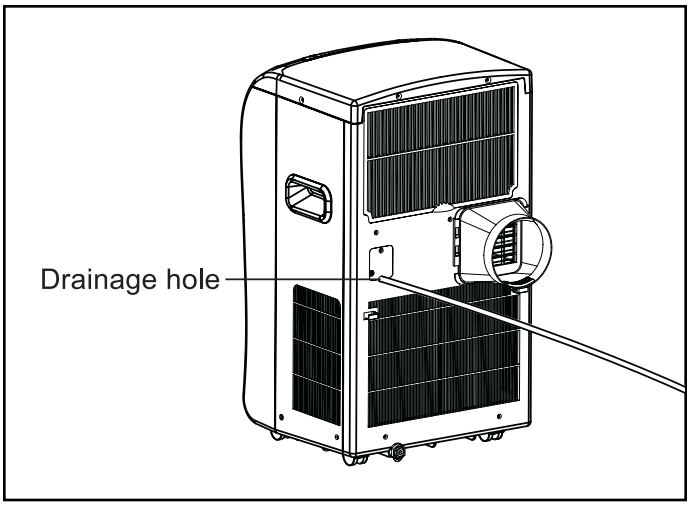


Instruction: Install two screws into installation board II



Water drainage hose installation

Fit the drainage hose to the drainage hole in the back of the unit.

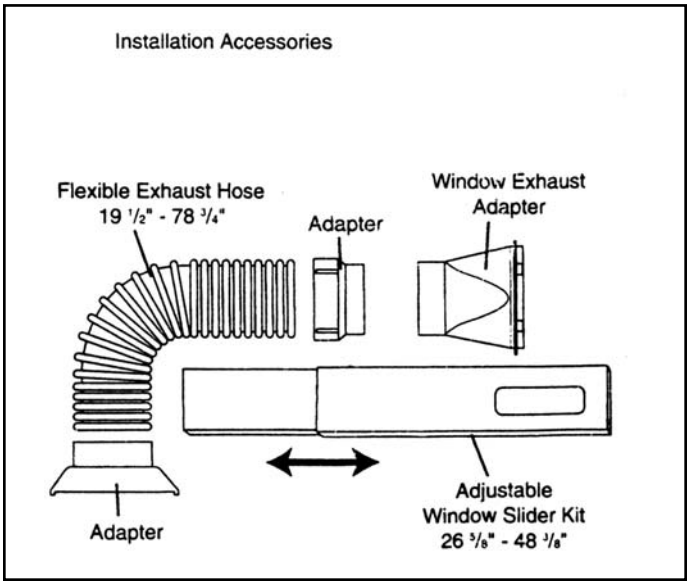


Installation accessories

Flexible exhaust hose with adapters..... 1/set
Stretches from 19-1/2” (50cm) up to 78-3/4(200cm) overall

Window exhaust adapter (flat mouth)..... 1pc

Adjustable window slider kit..... 2/set
From 26-5/8” (67.5 cm) up to 48-3/8” (123cm)



Friedrich Air Conditioning Company
P.O. Box 1540
San Antonio, TX 78295
210.357.4400
www.friedrich.com

PORTABLE AIR CONDITIONERS LIMITED WARRANTY

FIRST YEAR

ANY PART: If any part supplied by FRIEDRICH fails because of a defect in workmanship or material within twelve months from date of original purchase, FRIEDRICH will repair the product at no charge, provided the product is transported to a Friedrich Authorized Service Center for repair. ALL transportation charges are the sole responsibility of the owner. This remedy is expressly agreed to be the exclusive remedy within twelve months from the date of the original purchase.

SECOND THROUGH FIFTH YEAR

SEALED REFRIGERANT SYSTEM: If the Sealed Refrigeration System (defined for this purpose as the compressor, condenser coil, evaporator coil, reversing valve, check valve, capillary, filter drier, and all interconnecting tubing) supplied by FRIEDRICH in your Room Air Conditioner fails because of a defect in workmanship or material within sixty months from date of purchase, FRIEDRICH will pay a labor allowance and parts necessary to repair the Sealed Refrigeration System; **PROVIDED** FRIEDRICH will not pay the cost of diagnosis of the problem, removal, freight charges, and transportation of the air conditioner to and from the Service Agency, and the reinstallation charges associated with repair of the Sealed Refrigeration System. All such cost will be the sole responsibility of the owner. This remedy is expressly agreed to be the exclusive remedy within sixty months from the date of the original purchase.

APPLICABILITY AND LIMITATIONS: This warranty is applicable only to units retained within the Fifty States of the U.S.A., District of Columbia, and Canada. This warranty is not applicable to:

1. Air filters or fuses.
2. Products on which the model and serial numbers have been removed.
3. Products which have defects or damage which results from improper installation, wiring, electrical current characteristics, or maintenance; or caused by accident, misuse or abuse, fire, flood, alterations and/or misapplication of the product and/or units installed in a corrosive atmosphere, default or delay in performance caused by war, government restrictions or restraints, strikes, material shortages beyond the control of FRIEDRICH, or acts of God.

OBTAINING WARRANTY PERFORMANCE: Service will be provided by the **FRIEDRICH Authorized Dealer or Service Organization** in your area. They are listed in the Yellow Pages. If assistance is required in obtaining warranty performance, write to: Room Air Conditioner Service Manager, Friedrich Air Conditioning Co., P.O. Box 1540, San Antonio, TX 78295-1540.

LIMITATIONS: THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES. Anything in the warranty notwithstanding, ANY IMPLIED WARRANTIES OF FITNESS FOR PARTICULAR PURPOSE AND/OR MERCHANTABILITY SHALL BE LIMITED TO THE DURATION OF THIS EXPRESS WARRANTY. MANUFACTURER EXPRESSLY DISCLAIMS AND EXCLUDES ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGE FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY.

NOTE: Some states do not allow limitations on how long an implied warranty lasts, or do not allow the limitation or exclusion of consequential or incidental damages, so the foregoing exclusions and limitations may not apply to you.

OTHER: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

PROOF OF PURCHASE: Owner must provide proof of purchase in order to receive any warranty related services.

All service calls for explaining the operation of this product will be the sole responsibility of the consumer.

All warranty service must be provided by an **Authorized FRIEDRICH Service Agency**, unless authorized by FRIEDRICH prior to repairs being made.